180

SERVICE MANUAL SR1100L

marantz®

model SR1100L

Stereophonic Receiver

MARANTZ DESIGN AND SERVICE

Using superior design and selected high grade components, MARANTZ has created the ultimate in stereo sound. Only original MARANTZ parts can insure that your MARANTZ product will continue to perform to the specifications for which it is famous.

Parts for your MARANTZ stereo are generally available within 72 hours throughout the nation via a toll-free line to our National Parts Depot in California. The sales professionals who take your call immediately refer to their own desk top computer terminal and can quickly determine the availability and price information you require. If for some reason, your order should exceed our available stock, we usually can instantly provide an alternate replacement part or current delivery information. When the order is placed and confirmed, the computer simultaneously generates "hard copy" orders at the distribution center. As hard copies come directly from the computer to the national parts depot, your requested stock is assembled and prepared for shipment and placed on the first available carrier for delivery to you.

ORDERING PARTS

Phone orders will eliminate mail delays, and we encourage the use of this method. If you order by mail, use MARANTZ parts order forms which are available from our National Parts Depot located at the following address:

The following information must be supplied to eliminate delays in processing your order:

1. Complete address.
2. Complete part numbers.
3. Complete description of parts.
4. Model number for which part is required (indicate MARANTZ).
5. Account number (for account customers only).

Direct consumers will be provided with the current retail prive quotation on available parts in order to advise them of the cost of the parts and shipping.

OVERSEAS PARTS ORDERING

Parts may also be ordered from the following overseas addresses:

Marantz Australia
32 Cross Street
Brookvale, N.S.W. 2100
Australia

Marantz Germany Gmbh
Max-Planck-Straße 22,
D-6072 Dreieich
West Germany

Marantz Audio U.K., Ltd.
193, London Road
STAINES, Middlesex
United Kingdom

Marantz Svenska A.B.
Franzengatan 6
10425 Stockholm
Sweden

Marantz Europe, S.A.
326, Avenue Louise
Boite 32
1050 Brussels
Belgium

Marantz Belgium
45 Rue Auguste Van Zande
1080 Brussels
Belgium

Marantz France
4 Rue Bernard Palissy
92600 Asnieres
France

Marantz Norske A.S.
Refstadalleen 13
Oslo 5
Norway

All of the above locations are fully equipped to take care of your total service needs. Because various countries have differing configuration requirements, it is necessary that you contact the service facility in your particular country. In the event that there is no service location listed for your country, please contact the nearest facility for the necessary assistance.

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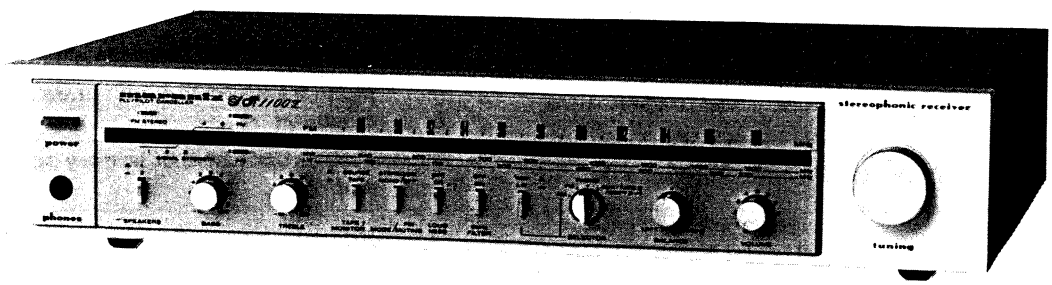


INTRODUCTION

This service manual was prepared for use by Authorized Warranty Stations and contains service information for Marantz Model SR1100L Stereophonic Receiver.

Servicing information and voltage data included in this manual are intended for use by the knowledgeable and experienced technician only. All instructions should be read carefully. No attempt should be made to proceed without a good understanding of the operation of the receiver.

The parts list furnishes information by which replacement parts may be ordered from the Marantz Company. A simple description is included for parts which can usually be obtained through local suppliers.

1. P.W. BOARDS

As can be seen from the circuit diagram the chassis of Model SR1100L consists of the following units. Each unit mounted on a printed circuit board is described within the square enclosed by a bold dotted line on the circuit diagram.

1. Tuner . . . . . mounted on P.W. Board P100
2. Main Amp/Power Supply . . . . . mounted on P.W. Board P700
3. Volume/Balance Push Switch . . . . . mounted on P.W. Board PS00
4. Speaker Terminal . . . . . mounted on P.W. Baord PT00
5. Tuning LED . . . . . mounted on P.W. Board PX00
6. Antenna Coil . . . . . mounted on P.W. Board PB00
7. Power Switch . . . . . mounted on P.W. Board PU00

2. TEST EQUIPMENT REQUIRED FOR SERVICING

This table lists the test equipment required for servicing the Model SR1100L Receiver.

Item	Manufacturer and Model No.	Use
AM Signal Generator		Signal source for AM alignment
Test Loop		Use with AM Signal Generator
FM Signal Generator MPX Signal Generator	Sound Technology Model 1000A	Signal source for FM alignment Stereo separation alignment and trouble shooting
Distortion Analyzer Audio Oscillator AC VTVM	Sound Technology Model 1700A	Distortion measurements Sinewave and squarewave signal source Voltage measurements (AC)
Oscilloscope	Tektronix Model T932 Philips Model 3232	Waveform analysis and trouble shooting and ASO alignment
Frequency Counter	Fluke Model 1900A	MPX Oscillator adjustment (VCO)
Circuit Tester		Trouble shooting
DC VTVM	Fluke Model 8000 "Digital" Simpson Model 313, Triplet Model 801	Voltage measurements (DC)
AC Wattmeter	Simpson Model 1379	Monitors primary power to amplifier
AC Ammeter	Commercial Grade (1-10A)	Monitors amplifier output under short circuit condition
Line Voltmeter	Simpson Model 1359	Monitors potential of primary power to amplifier
Variable Autotransformer	Superior Electronic Co., Powerstat Model 116B-10A	Adjusts level of primary power to amplifier
Shorting Plug	Use phono plug with 600-ohm across center pin and shell	Shorts amplifier input to eliminate noise pickup
Output Load (8 ohms, ±0.5%, 100W)	Commercial Grade	Provides 8-ohm load for amplifier output termination
Output Load (4 ohms, ±0.5%, 100W)	Commercial Grade	Provides 4-ohm load for amplifier output termination

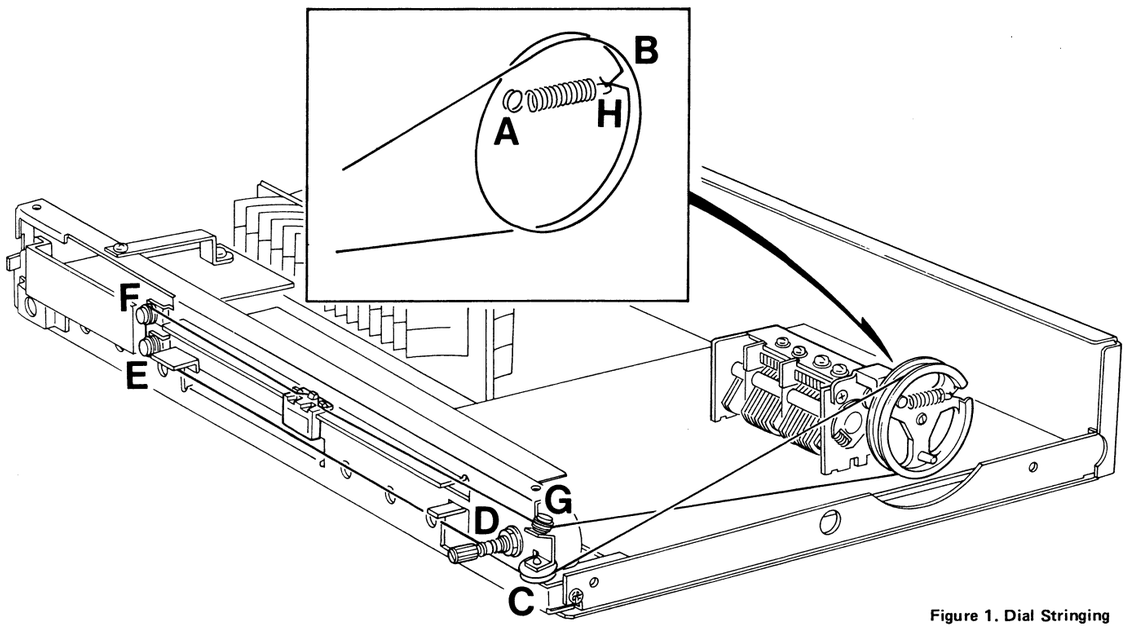


Figure 1. Dial Stringing

SR1100L TUNER P.W. BOARD

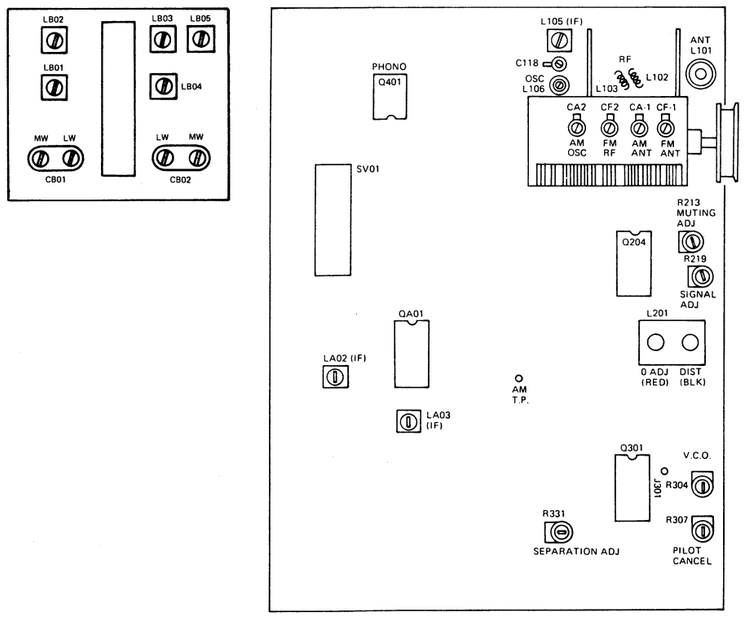


Figure 2. Adjustment Point Locations

3. ALIGNMENT PROCEDURES

A dummy resistor of 47 k-ohms must be connected across the tuner output terminals before alignment.

3.1 FM Alignment Procedures (Function switch in the "FM" position)

FM RF Alignment

Step	Signal Source Connection	Signal Frequency	Indicator Connection	Set the Digital Readout Frequency	Adjust
1	RF generator to FM antenna terminals through matching network (300 ohms, balanced) (Maintain RF level below limit.)	87.4 MHz	VTVM to L or R channel output	Tuning capacitor minimum closed.	L106 for maximum output.
2		108.2 MHz		Tuning capacitor maximum open.	C118 for maximum output.
3		90 MHz		90 MHz	L101, L103 for maximum output.
4		106 MHz		106 MHz	ANT. RF. TRIM. CAP. for maximum output.
5	Repeat steps 1 to 4.				
6	Check overall response curve and repeat above steps as necessary to obtain maximum sensitivity.				
7	No connection	No signal	"0" center meter or DC current meter in 100μA range between J201 and J202		L201 primary core so that the meter indicates its center or may read "0". (RED core)
8	RF generator 1mV (or 300μV, only Step 10) output to FM antenna terminals through matching network. (300 ohms, balanced)	98 MHz	Distortion meter to L or R channel output	98 MHz	L201 Secondary core (BLK) for minimum distortion.
9					
10		98 MHz		98 MHz	R219 so that signal strength LED may light 5 points.

3.2 Muting Circuit Alignment

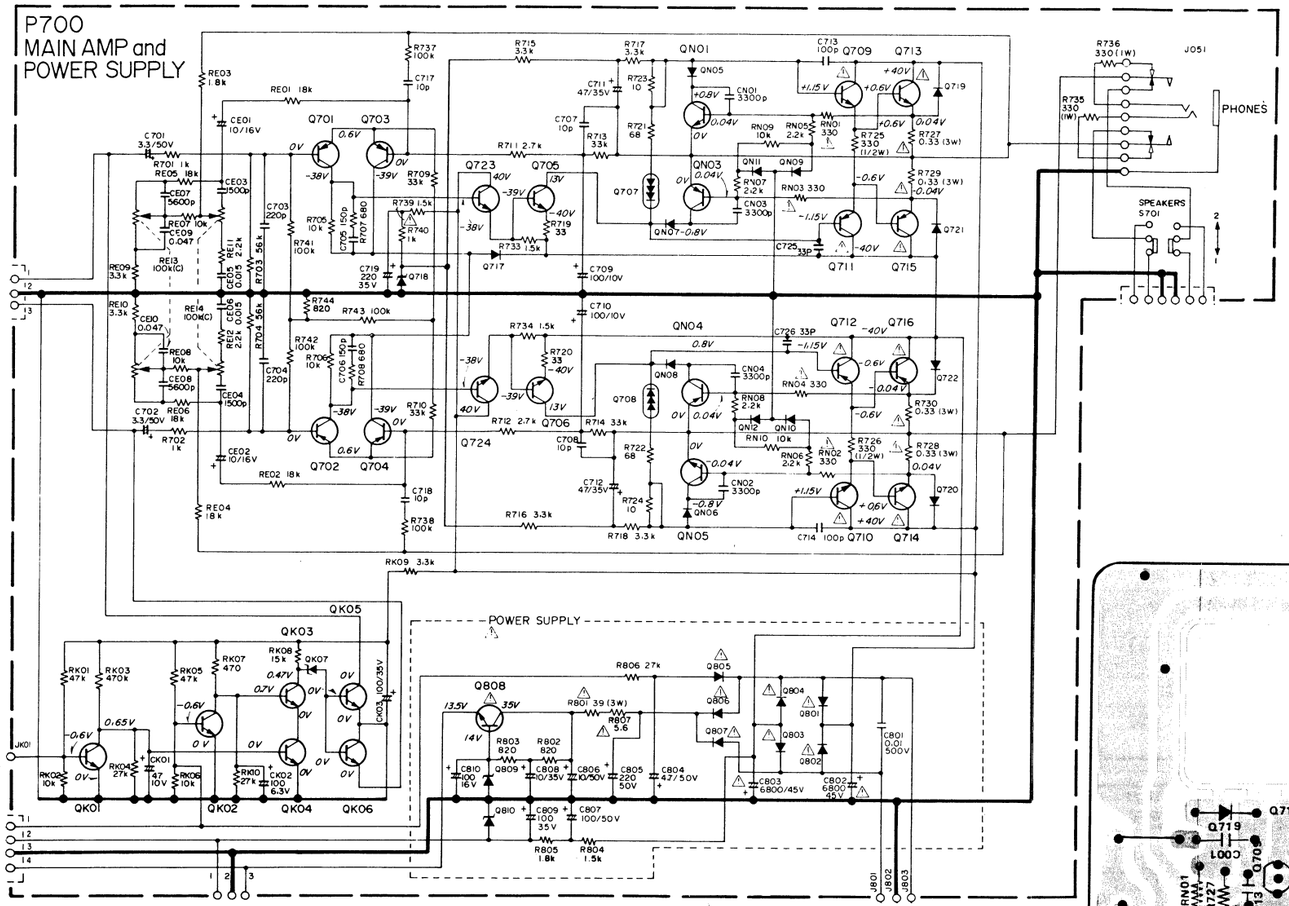
Step	Signal Source Connection	Signal Frequency	Indicator Connection	Set the Digital Readout Frequency	Adjust
1	RF generator 12.5μV output to FM antenna terminals through matching network (300 ohms, balanced)	98 MHz	VTVM to R or L channel output	98 MHz	R213 for 12.5μV threshold level. (During this adjustment turn the muting pushswitch "ON".)

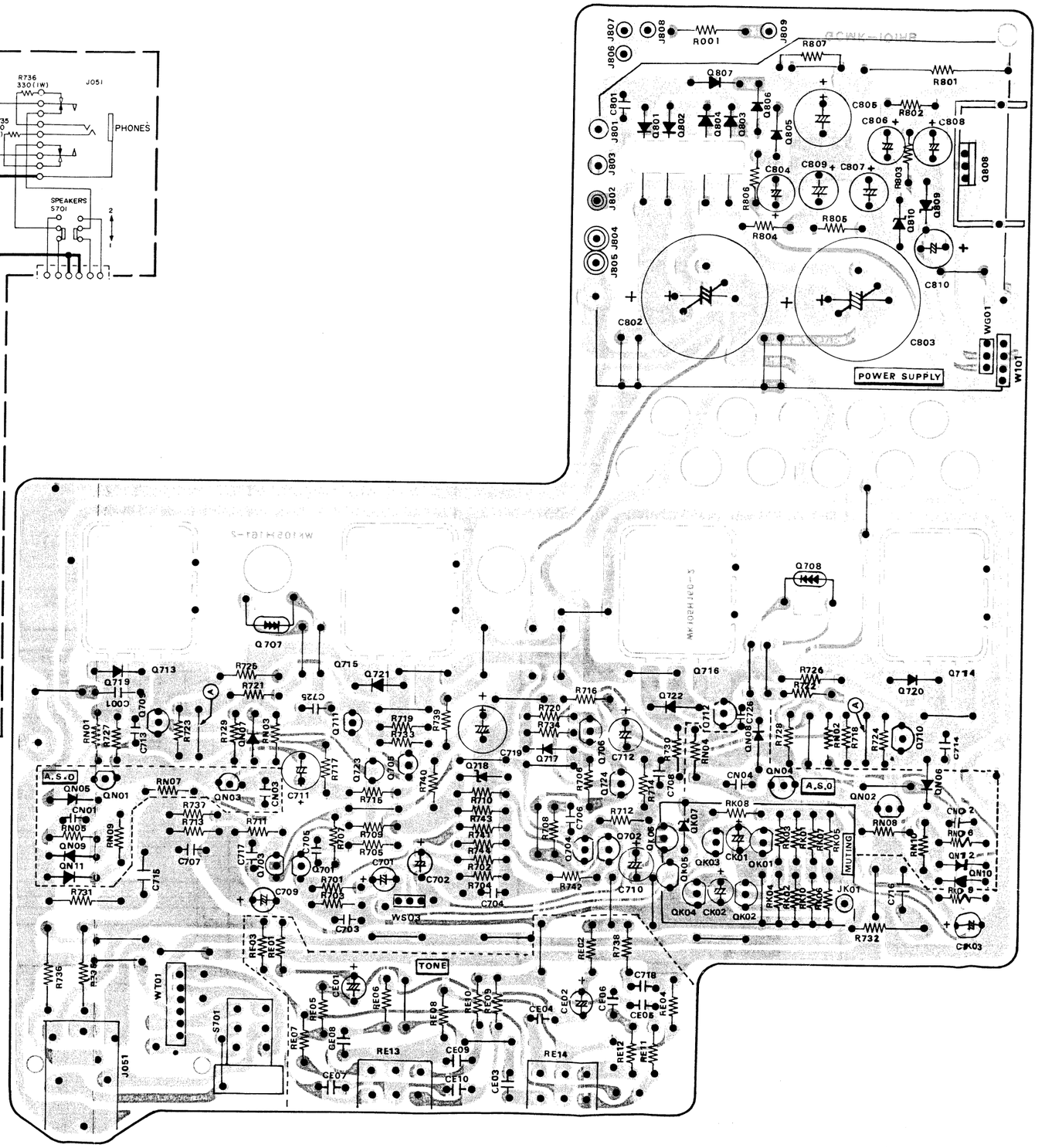
3.3 Multiplex Alignment Procedures (Function switch in the "FM" position/Mode switch in the "STEREO" position)

Step	Signal Source Connection	Signal Frequency	Indicator Connection	Set the Digital Readout Frequency	Adjust
1	RF generator to FM antenna terminals through matching network (300 ohms, balanced), with 1mV FM stereo simulator RF level and 100% modulation (pilot 9%)	No Modulation	Frequency counter to J301	98 MHz	R304 so that Frequency counter may precisely read 76 kHz.
2		Stereo, left (1,000 Hz)	VTVM to right channel output		R331 for maximum output and same separation in both channels.
3		Stereo, right (1,000 Hz)	VTVM to left channel output		
4		Pilot only	VTVM to R or L output	98 MHz	R307 for minimum output and same output in both channels.

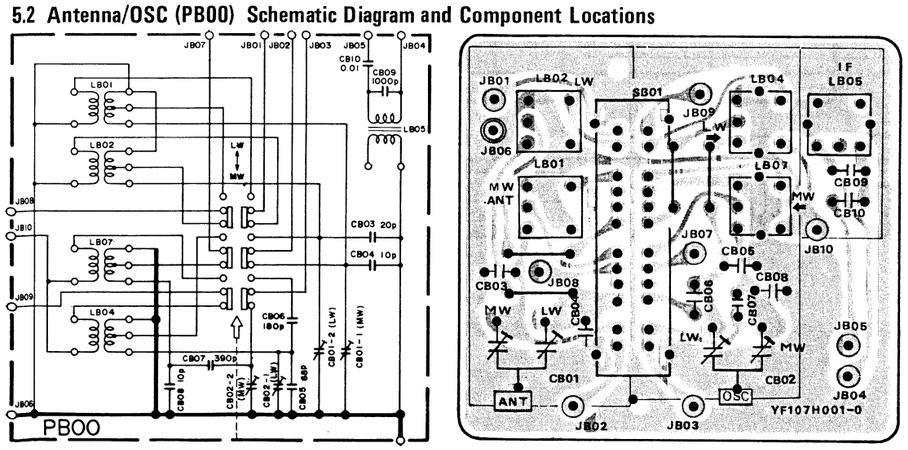
5. DIAGRAM AND COMPONENT LOCATIONS

5.1 Main Amp. & Power Supply (P700) Schematic Diagram and Component Locations

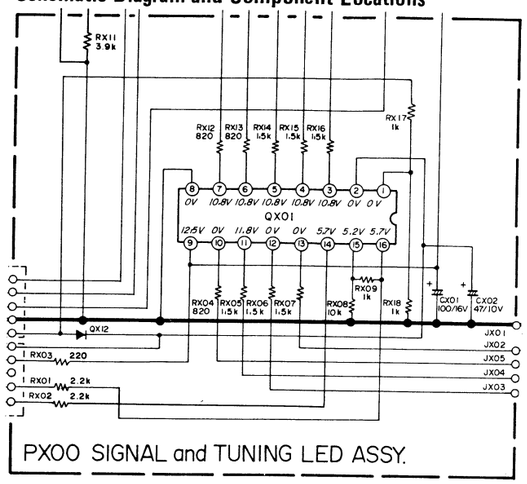


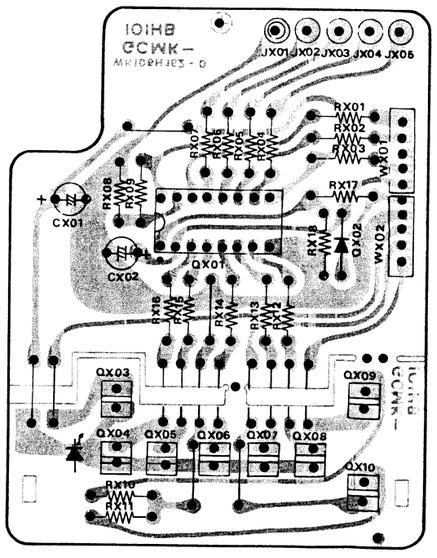


5.2 Antenna/OSC (PB00) Schematic Diagram and Component Locations

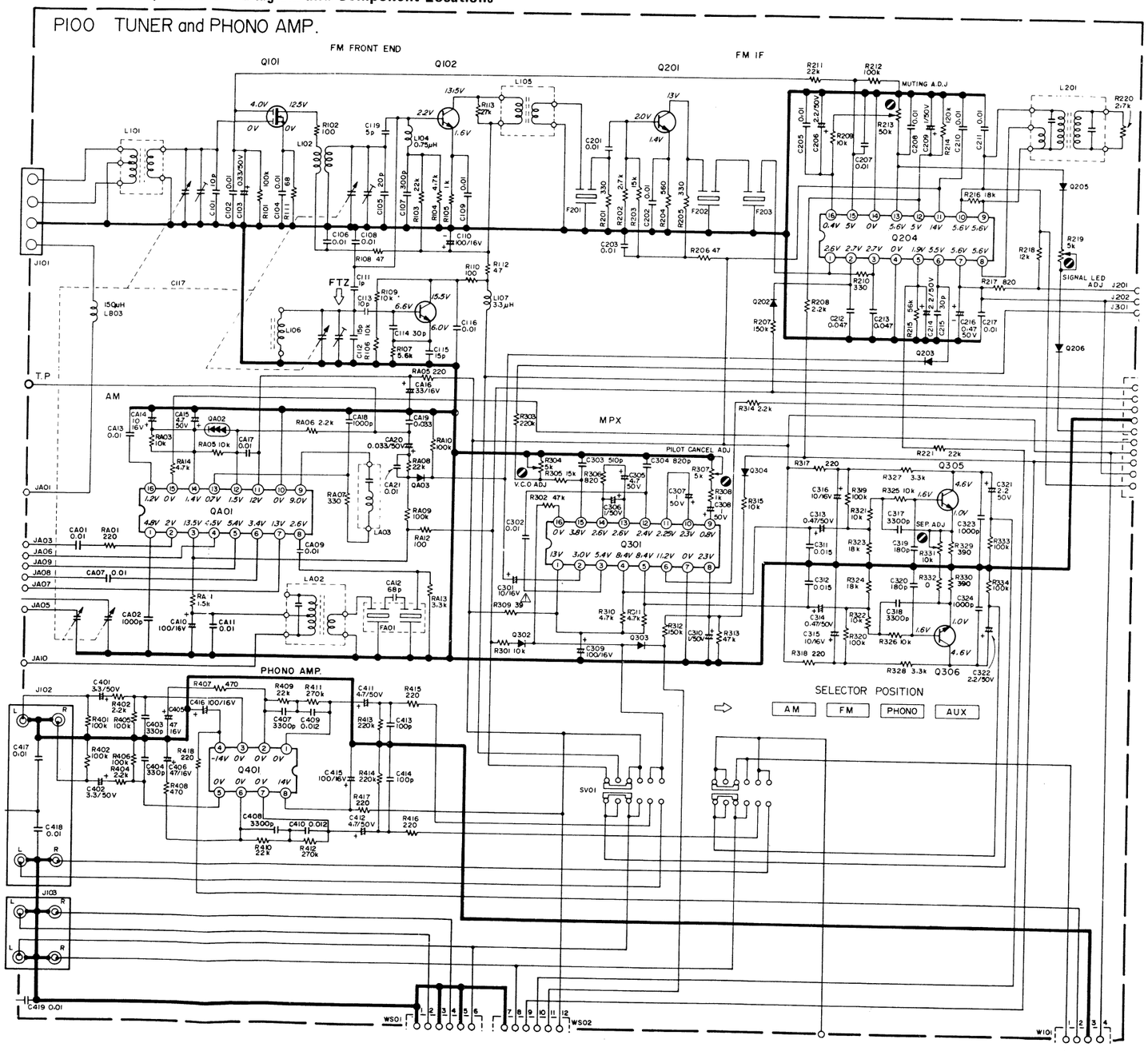


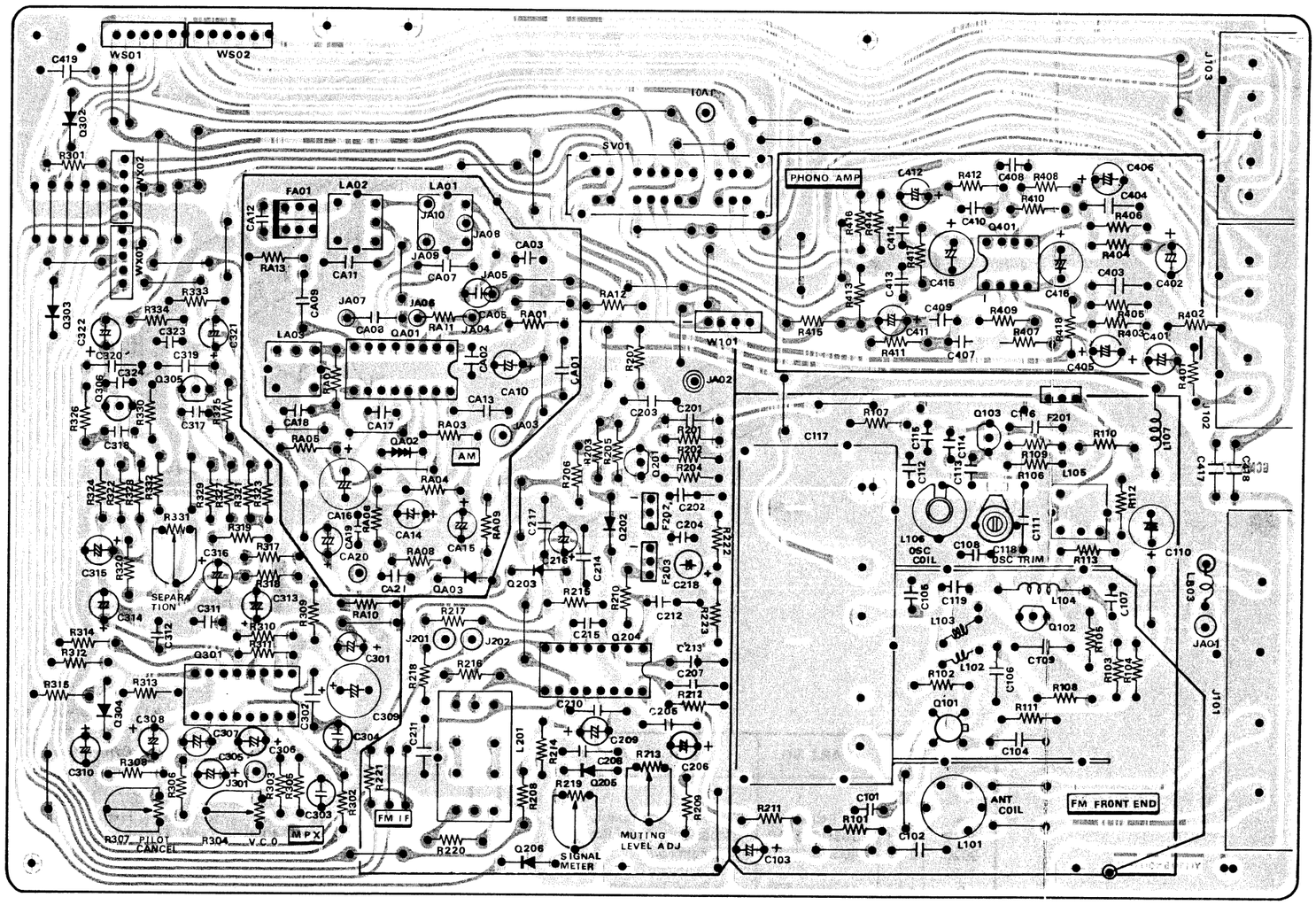
5.3 Signal & Tuning LED (PX00) Schematic Diagram and Component Locations



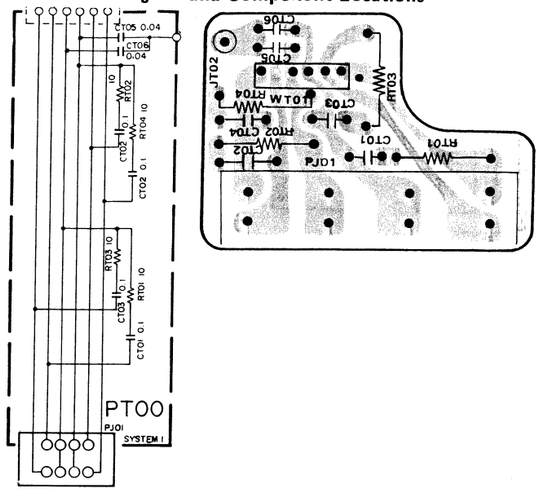


5.4 Tuner (P100) Schematic Diagram and Component Locations

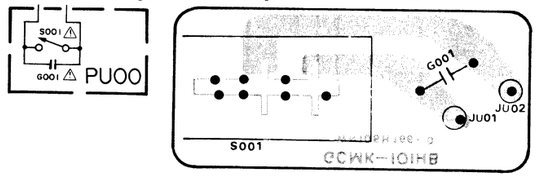




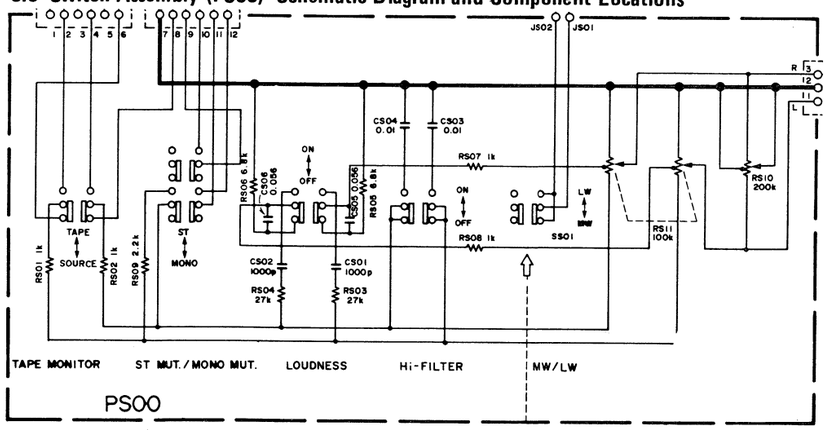
5.6 Speaker Terminal (PT00)
Schematic Diagram and Component Locations

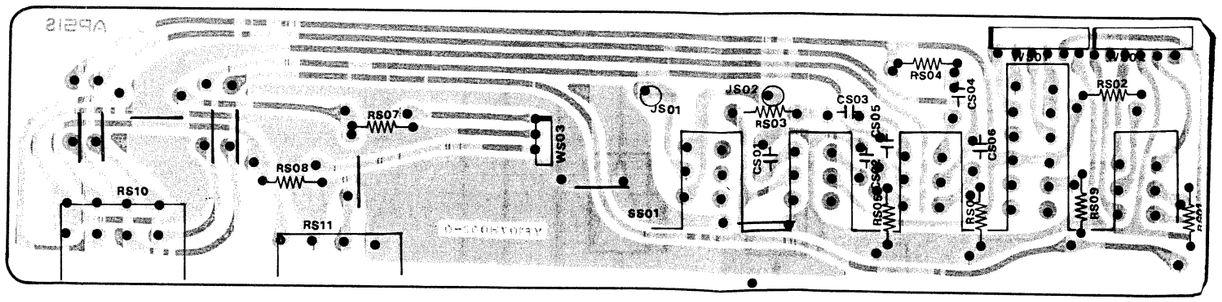


5.7 Power Switch (PU00)
Schematic Diagram and Component Locations

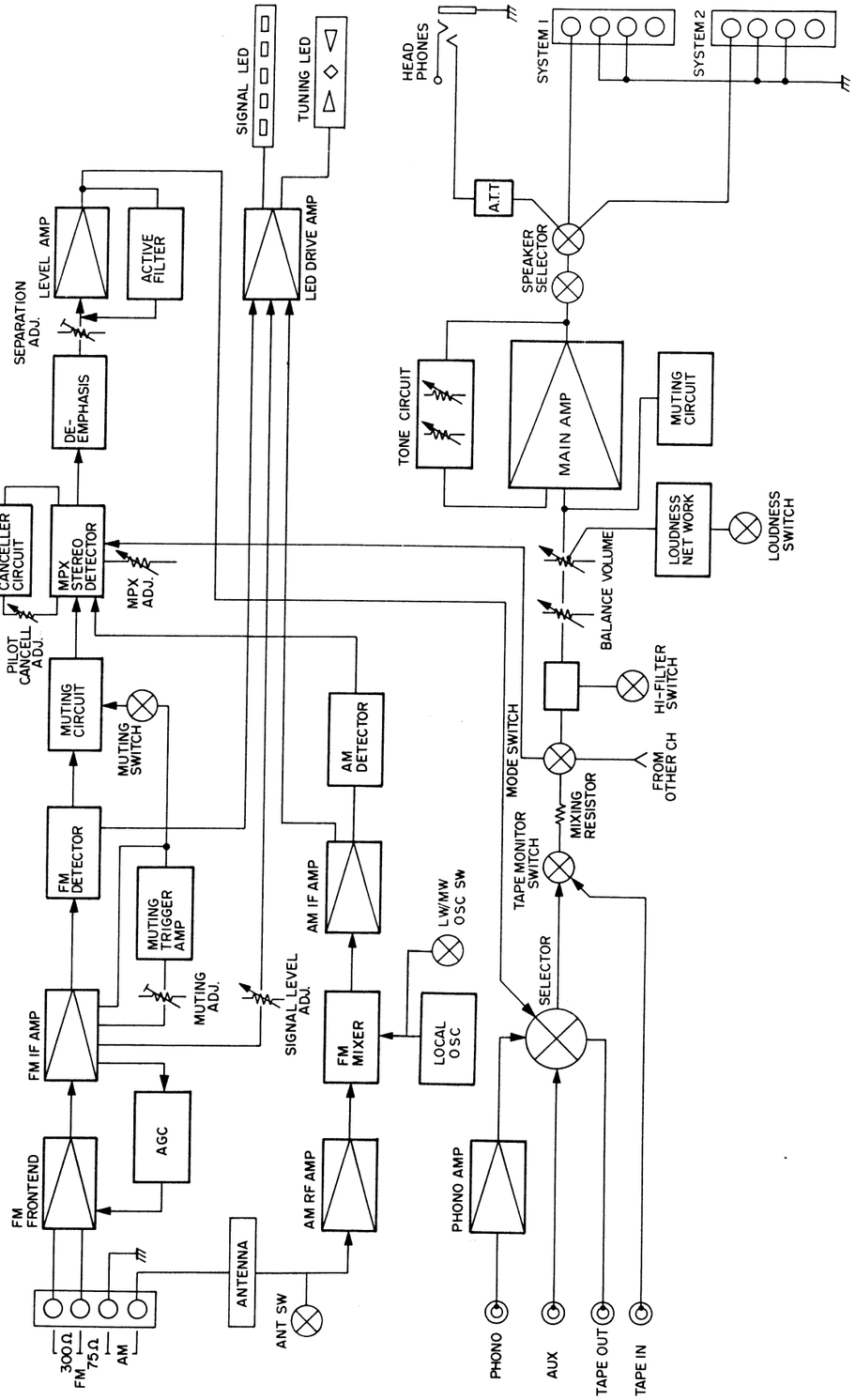


5.5 Switch Assembly (PS00) Schematic Diagram and Component Locations



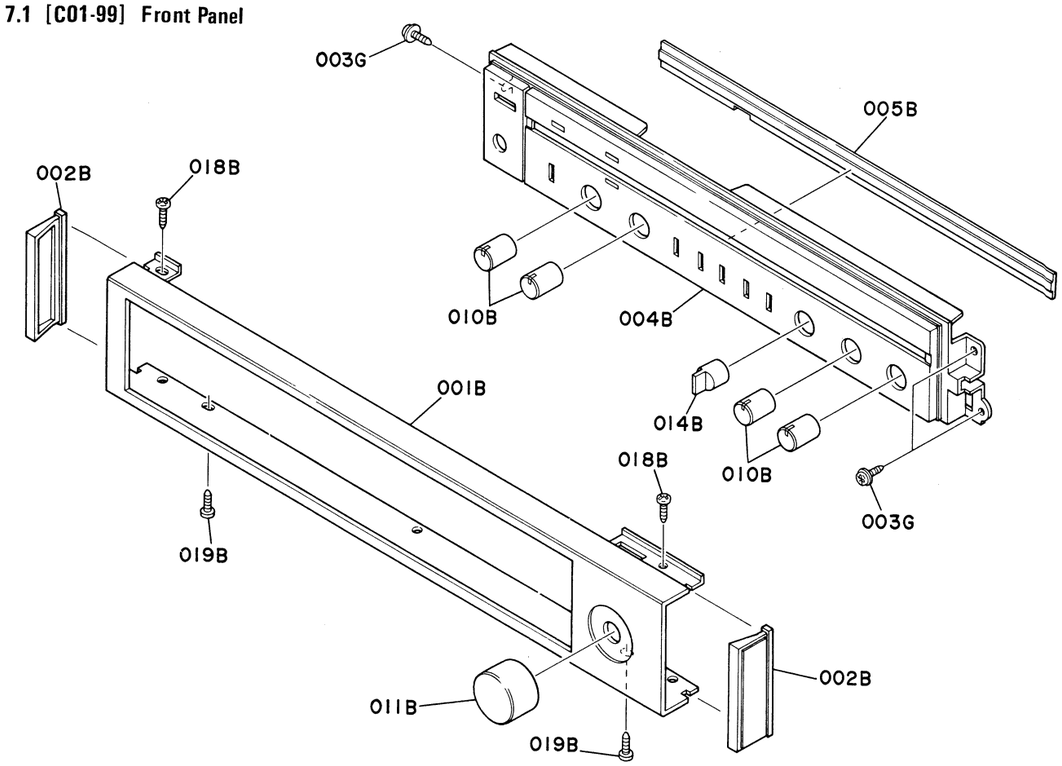


6. BLOCK DIAGRAM



7. EXPLODED VIEWS AND PARTS LIST

7.1 [C01-99] Front Panel

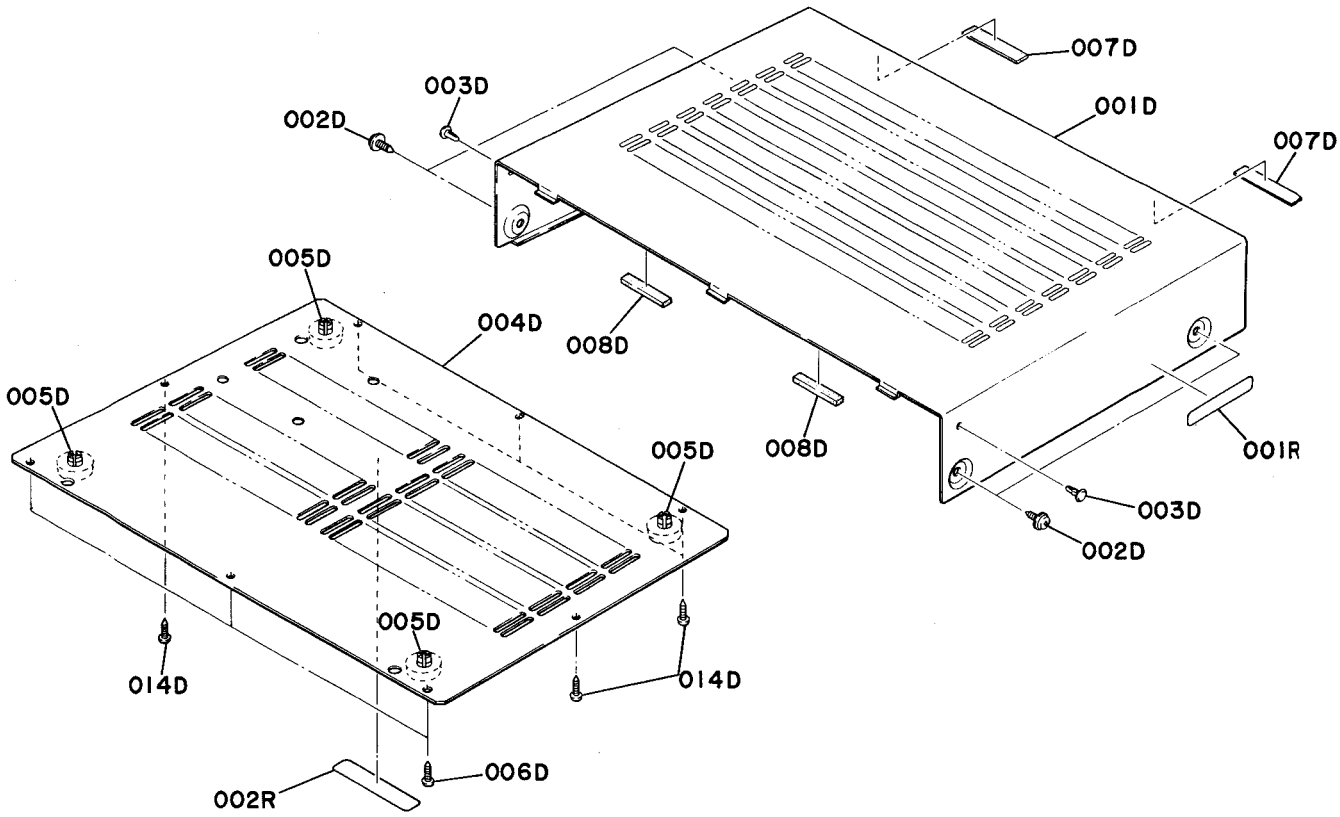


• (N): for Europe
• (T): for United Kingdom

REF. DESIG.	Q'TY N	Q'TY T	PART NO.	DESCRIPTION
A	1	1	105H063400	Front Panel, Assembly
001B	1	1	105H063010	Escutcheon, Front Panel
002B	2	2	403H067010	Cap, Panel Side
B	1	1	107H063400	Dial Panel Assembly
004B	1	1	107H063010	Escutcheon, Dial Panel
005B	1	1	105H158010	Window

REF. DESIG.	Q'TY N	Q'TY T	PART NO.	DESCRIPTION
010B	4	4	105H154020	Knob, Bass, Treble, Vol., Bal.
011B	1	1	403H154020	Knob, Tuning
014B	1	1	105H154060	Knob, Selector
018B	2	2	51300306B0	P.H. Tapped Screw P3 x 6
019B	2	2	51300306B0	P.H. Tapped Screw P3 x 6
003G	3	3	51280308B0	B.H. Tapped Screw B3 x 8

7.2 [C02-99] Top Cover

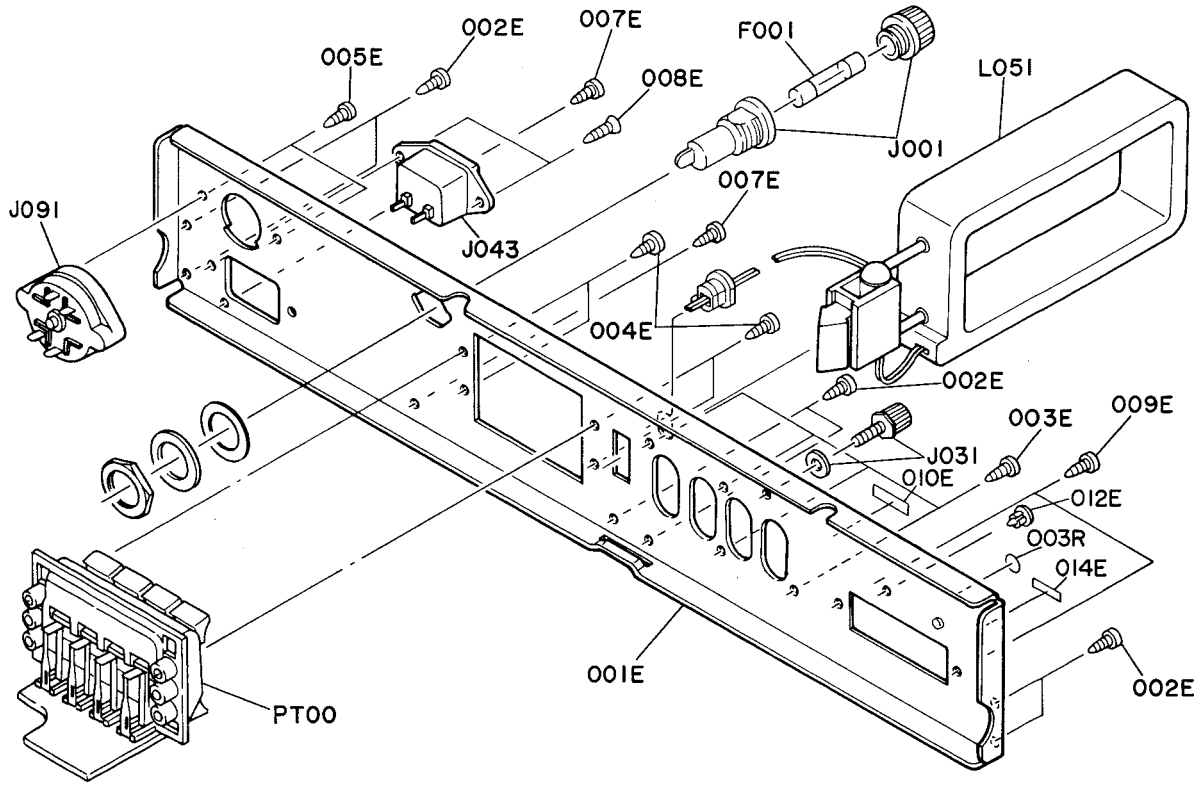


- (N): for Europe
- (T): for United Kingdom

REF. DESIG.	Q'TY N	Q'TY T	PART NO.	DESCRIPTION
001D	1	1	208H257010	Lid, Top Cover
002D	4	4	51260408U0	B.T. Screw B4 x 8
003D	2	2	2991259110	Bushing
004D	1	1	105H257010	Lid, Buttom Cover
005D	4	4	403H057010	Leg
006D	3	3	51280308B0	B.H. Tapped Screw B3 x 8
007D	2	2	2965118010	Spacer
008D	2	2	208H056010	Buffer
014D	5	5	51280308B0	B.H. Tapped Screw B3 x 8

REF. DESIG.	Q'TY N	Q'TY T	PART NO.	DESCRIPTION
001R	1	1	2932861110	Label, Top Cover
002R	1	1	2578861010	Label, Bottom Cover

7.3 [C03-99] Rear Panel

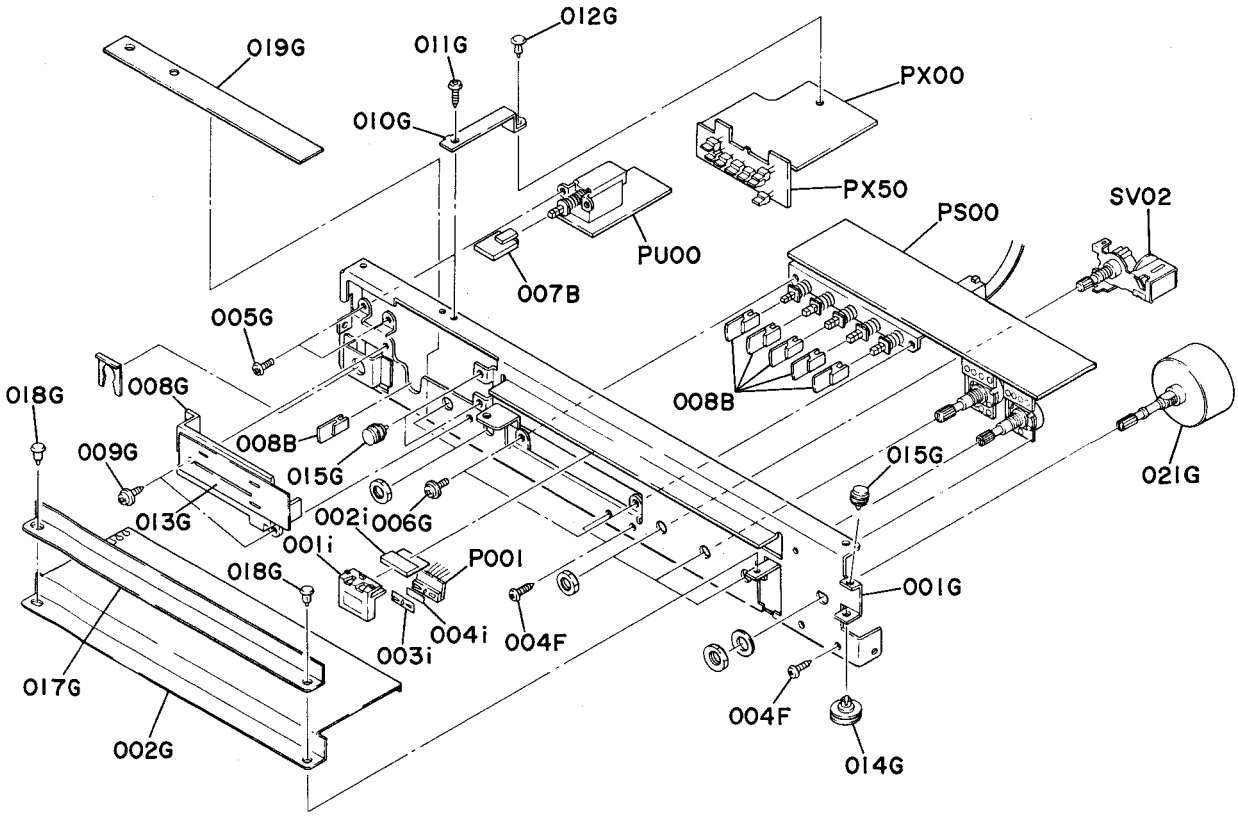


- (N): for Europe
- (T): for United Kingdom

REF. DESIG.	Q'TY N	Q'TY T	PART NO.	DESCRIPTION
001E	1		107H160210	Bracket, Rear Panel
001E		1	107H160220	Bracket, Rear Panel
002E	6	6	51280308U0	B.H. Tapped Screw B3 x 8
003E	4	4	51280308U0	B.H. Tapped Screw B3 x 8
004E	4	4	51280308U0	B.H. Tapped Screw B3 x 8
005E	2	2	51280308U0	B.H. Tapped Screw B3 x 8
007E	2	2	51280308U0	B.H. Tapped Screw B3 x 8
008E	2	2	51420308T0	O.C.H. Tapped Screw O3 x 8
009E	2	2	51280308U0	B.H. Tapped Screw B3 x 8
010E	1	1	2112265010	Indicator
012E	1	1	2912259020	Bushing
014E	1	1	4581861010	Label, Made in Japan

REF. DESIG.	Q'TY N	Q'TY T	PART NO.	DESCRIPTION
003R		1	4204861020	Label
⚠F001	1	1	FS10080800	Fuse T800mA
⚠J001	1	1	YJ08000290	Jack, Fuse Holder
J031	1	1	YL03010250	Terminal, GND.
⚠J043	1	1	YP04000590	Plug, AC Inlet
⚠J091	1		BY05060040	Voltage Selector
⚠J091		1	BY05030030	Voltage Selector
L051	1	1	LA00015010	Loop Ant.

7.4 [P01-99] Front Chassis and General Parts

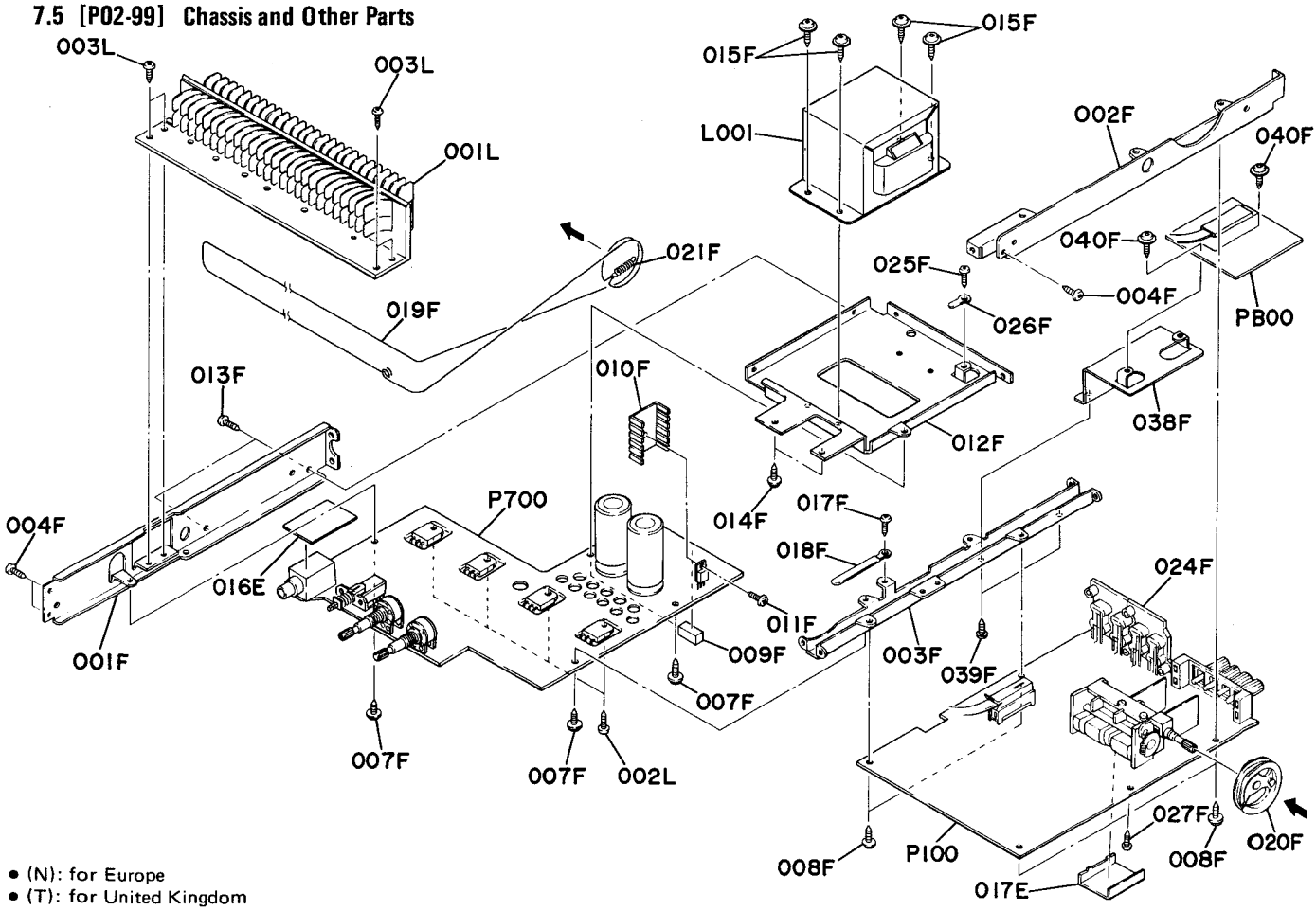


- (N): for Europe
- (T): for United Kingdom

REF. DESIG.	Q'TY N	Q'TY T	PART NO.	DESCRIPTION
007B	1	1	208H154060	Knob, Power Switch
008B	6	6	105H154010	Knob, Push Switch
004F	3	3	51280306B0	B.H. Tapped Screw B3 x 6
001G	1	1	105H160010	Bracket, Front Chassis
002G	1	1	105H120010	Insulator
005G	2	2	51100306A9	B.H.M. Screw B3 x 6
006G	2	2	51100306A9	B.H.M. Screw B3 x 6
008G	1	1	105H118010	Spacer, LED
009G	2	2	51260308B0	B.T. Screw B3 x 8
010G	1	1	105H160020	Bracket
011G	1	1	51280308B0	B.H. Tapped Screw B3 x 8
012G	1	1	2276005050	Clamper
013G	1	1	105H118020	Spacer

REF. DESIG.	Q'TY N	Q'TY T	PART NO.	DESCRIPTION
014G	1	1	2259262500	Pulley
015G	3	3	2276262500	Pulley
017G	1	1	105H053010	Cover, Pointer
018G	2	2	2912259020	Bushing
019G	1	1	105H120020	Insulator
021G	1	1	105H273010	Flywheel
001i	1	1	403H103010	Pointer
002i	1	1	403H118010	Spacer
003i	1	1	403H303020	Mask
004i	1	1	403H303030	Mask
SV02	1	1	SR00040080	Rotary Switch, Selector

7.5 [P02-99] Chassis and Other Parts

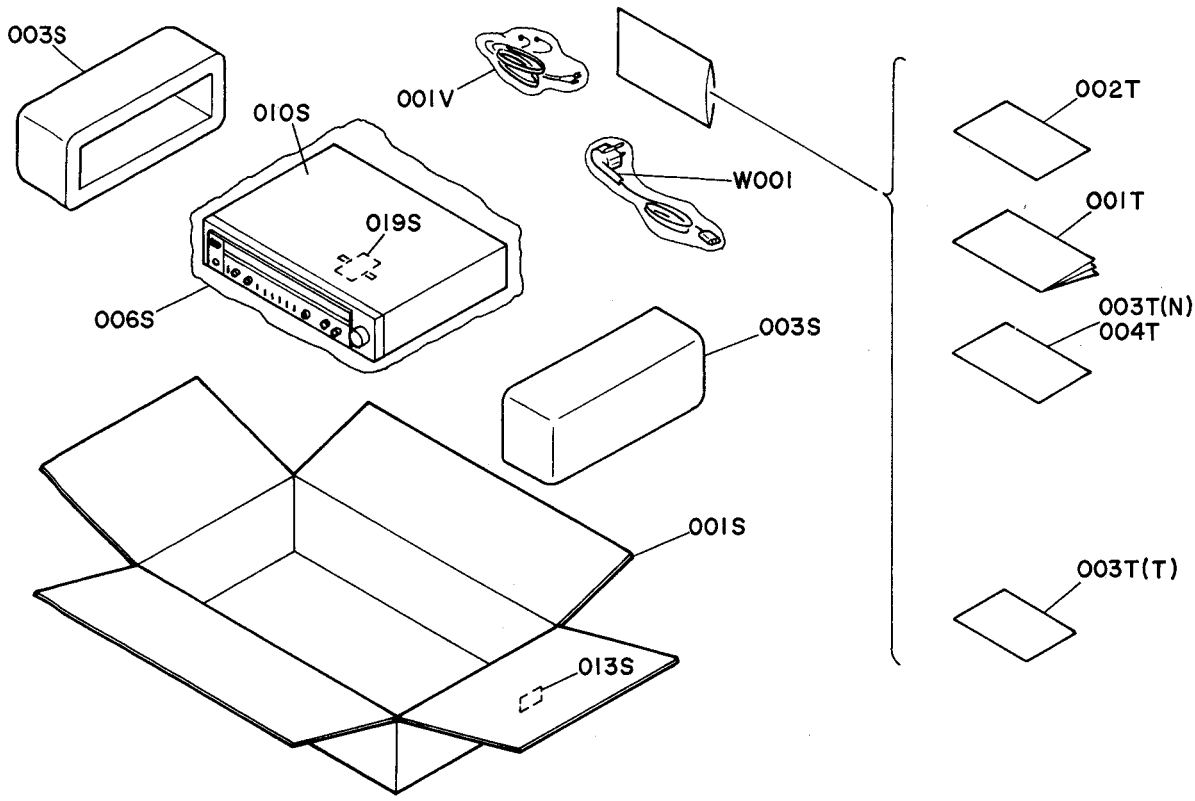


- (N): for Europe
- (T): for United Kingdom

REF. DESIG.	Q'TY N	Q'TY T	PART NO.	DESCRIPTION	
001F	1	1	105H126010	Stay, Left	
002F	1	1	105H126020	Stay, Right	
003F	1	1	105H126030	Stay, Center	
004F	3	3	51280306B0	B.H. Tapped Screw	B3 x 6
007F	4	4	51260308B0	B.T. Screw	B3 x 8
008F	4	4	51260308B0	B.T. Screw	B3 x 8
009F	1	1	2218056010	Buffer	
010F	1	1	202H267030	Heatsink	
011F	1	1	51280308B0	B.H. Tapped Screw	B3 x 8
012F	1	1	105H004010	Table, Transformer	
013F	2	2	51280308B0	B.H. Tapped Screw	B3 x 8
014F	2	2	51260308B0	B.T. Screw	B3 x 8
015F	4	4	51260408U0	B.T. Screw	B4 x 8
017F	1	1	51280306B0	B.H. Tapped Screw	B3 x 6
018F	1	1	2871005010	Clamper	
019F	1	1	72040805A0	String (135)	
020F	1	1	403H159010	Drum, Dial	
021F	1	1	2112115020	Spring	
024F	2	2	2259109040	Shield	
025F	1	1	51280306B0	B.H. Tapped Screw	B3 x 6
026F	1	1	62030049W0	Lug	
027F	1	1	51280308B0	B.H. Tapped Screw	B3 x 8
038F	1	1	107H160010	Bracket	
039F	2	2	51280308B0	B.H. Tapped Screw	B3 x 8
040F	2	2	51260308B0	B.T. Screw	B3 x 8
016E	1	1	208H120010	Insulator	
017E	1	1	105H109010	Shield	

REF. DESIG.	Q'TY N	Q'TY T	PART NO.	DESCRIPTION	
001L	1	1	105H267010	Heatsink	
002L	4	4	51280310B0	B.H. Tapped Screw	B3 x 10
003L	4	4	51280308B0	B.H. Tapped Screw	B3 x 10
⚠L001	1		TS16626020	Power Transformer	
⚠L001		1	TS16626060	Power Transformer	

7.6 [H01-99] Packing Materials



- (N): for Europe
- (T): for United Kingdom

REF. DESIG.	Q'TY N	Q'TY T	PART NO.	DESCRIPTION
001S	1	1	107H801010	Packing Case
003S	2	2	001H809010	Cushion
006S	1	1	9090909040	Polyethylene Sheet
010S	1	1	2918107350	Sheet
013S	4		9526019060	Serial No. Card
019S	1	1	2731821010	Silicagel
001T	1	1	105H851310	Instructions
002T	1	1	105H851320	Instructions
003T	1		107H856010	Circuit Diagram
003T		1	9630000200	Guarantee Card
004T		1	107H856010	Circuit Diagram

REF. DESIG.	Q'TY N	Q'TY T	PART NO.	DESCRIPTION
001V	1	1	ZA02000070	EXT. Antenna
⚠W001	1		ZC01805030	AC Power Cord
⚠W001		1	ZC01804030	AC Power Cord

7.7 ELECTRICAL PARTS

- (N): for Europe
- (T): for United Kingdom

REF. DESIG.	Q'TY N	Q'TY T	PART NO.	DESCRIPTION
				P100-TUNER CIRCUIT BOARD
P100	1	1	YG105H0010	P.W. Board, Tuner
	1	1	ZZ107H8010	P.W. Board Assembly
				P100-CAPACITORS
CA01	1	1	DA17103010	Ceramic 0.01μF ±20%
CA02	1	1	DK16102300	Ceramic 1000pF ±10%
CA07	1	1	DA17103010	Ceramic 0.01μF ±20%
CA09	1	1	DA17103010	Ceramic 0.01μF ±20%
CA10	1	1	EA10701630	Elect 100μF 16V
CA11	1	1	DA17103010	Ceramic 0.01μF ±20%
CA12	1	1	DD15680370	Ceramic 68pF ±15%
CA13	1	1	DA17103010	Ceramic 0.01μF ±20%
CA14	1	1	EA10601630	Elect 10μF 16V
CA15	1	1	EA47505030	Elect 4.7μF 50V
CA16	1	1	EA33601630	Elect 33μF 16V
CA17	1	1	DK18103320	Ceramic 0.01μF +80%−20%
CA18	1	1	DK16102300	Ceramic 1000pF ±10%
CA19	1	1	DF16333300	Film 0.033μF ±10%
CA20	1	1	DF17333300	Film 0.033μF ±20%
CA21	1	1	DF17103300	Film 0.01μF ±20%
C101	1	1	DD11100300	Ceramic 10pF ±0.5pF
C102	1	1	DA17103010	Ceramic 0.01μF ±20%
C103	1	1	EA33405030	Elect 0.33μF 50V
C104	1	1	DA17103010	Ceramic 0.01μF ±20%
C105	1	1	DD15150300	Ceramic 15pF ±5%
C106	1	1	DA17103010	Ceramic 0.01μF ±20%
C107	1	1	DD15301360	Ceramic 300pF ±5%
C108	1		DD15200300	Ceramic 20pF ±5%
C109	1	1	DA17103010	Ceramic 0.01μF ±20%
C110	1	1	EA10701630	Elect 100μF 16V
C111	1	1	DD10010370	Ceramic 1pF ±0.25pF
C112	1	1	DD15200340	Ceramic 20pF ±5%
C113	1	1	DD11100300	Ceramic 10pF ±0.5pF
C114	1	1	DD15300310	Ceramic 30pF ±5%
C115	1	1	DD15150300	Ceramic 15pF ±5%
C116	1	1	DA17103010	Ceramic 0.01μF ±20%
C117	1	1	CA32200060	Variable FM-3, AM-2
C118	1	1	CT11000080	Trimming 10pF
C119	1	1	DD10050370	Ceramic 5pF ±0.25pF
C201	1	1	DA17103010	Ceramic 0.01μF ±20%
C202	1	1	DA17103010	Ceramic 0.01μF ±20%
C203	1	1	DA17103010	Ceramic 0.01μF ±20%
C205	1	1	DA17103010	Ceramic 0.01μF ±20%
C206	1	1	EA22505030	Elect 2.2μF 50V
C207	1	1	DA17103010	Ceramic 0.01μF ±20%
C208	1	1	DA17103010	Ceramic 0.01μF ±20%
C209	1	1	EA10505030	Elect 1μF 50V
C210	1	1	DA17103010	Ceramic 0.01μF ±20%
C211	1	1	DA17103010	Ceramic 0.01μF ±20%
C212	1	1	DK18403320	Ceramic 0.04μF +80%−20%
C213	1	1	DK18403320	Ceramic 0.04μF +80%−20%
C214	1	1	EA22505030	Elect 2.2μF 50V
C215	1	1	DD15300370	Ceramic 30pF ±5%
C216	1	1	EA47405030	Elect 0.47μF 50V
C217	1	1	DA17103010	Ceramic 0.01μF ±20%
C301	1	1	EA10601630	Elect 10μF 16V
C302	1	1	DA17103010	Ceramic 0.01μF ±20%

REF. DESIG.	Q'TY N	Q'TY T	PART NO.	DESCRIPTION
C303	1	1	DF55511090	Film 510pF ±5%
C304	1	1	DF55821090	Film 820pF ±5%
C305	1	1	EA47503530	Elect 4.7μF 35V
C306	1	1	EA10505030	Elect 1μF 50V
C307	1	1	EQ10505010	Elect 1μF 50V (NP)
C308	1	1	EA10505030	Elect 1μF 50V
C309	1	1	EA22701630	Elect 220μF 16V
C310	1	1	EA10505030	Elect 1μF 50V
C311	1	1	DF16153300	Film 0.015μF ±10%
C312	1	1	DF16153300	Film 0.015μF ±10%
C313	1	1	EA47405030	Elect 0.47μF 50V
C314	1	1	EA47405030	Elect 0.47μF 50V
C315	1	1	EA10601630	Elect 10μF 16V
C316	1	1	EA10601630	Elect 10μF 16V
C317	1	1	DF16332300	Film 3300pF ±10%
C318	1	1	DF16332300	Film 3300pF ±10%
C319	1	1	DA16181010	Ceramic 180pF ±10%
C320	1	1	DA16181010	Ceramic 180pF ±10%
C321	1	1	EA22505030	Elect 2.2μF 50V
C322	1	1	EA22505030	Elect 2.2μF 50V
C323	1	1	DF16102300	Ceramic 1000pF ±10%
C324	1	1	DK16102300	Ceramic 1000pF ±10%
C401	1	1	EA33505030	Elect 3.3μF 50V
C402	1	1	EA33505030	Elect 3.3μF 50V
C403	1	1	DA16331010	Ceramic 330pF ±10%
C404	1	1	DA16331010	Ceramic 330pF ±10%
C405	1	1	EA47501630	Elect 47μF 16V
C406	1	1	EA47601630	Elect 47μF 16V
C407	1	1	DF16332300	Film 3300pF ±10%
C408	1	1	DF16332300	Film 3300pF ±10%
C409	1	1	DF16123300	Film 0.012μF ±10%
C410	1	1	DF16123300	Film 0.012μF ±10%
C411	1	1	EA47505030	Elect 4.7μF 50V
C412	1	1	EA47505030	Elect 4.7μF 50V
C413	1	1	DD15101370	Ceramic 100pF ±5%
C414	1	1	DD15101370	Ceramic 100pF ±5%
C415	1	1	EA10701630	Elect 100μF 16V
C416	1	1	EA10701630	Elect 100μF 16V
C417	1	1	DA17103010	Ceramic 0.01μF ±20%
C418	1	1	DA17103010	Ceramic 0.01μF ±20%
C419	1	1	DA17103010	Ceramic 0.01μF ±20%
				P100-RESISTORS
				(All Resistors are ±5% and ¼W)
RA01	1	1	GD05221140	220Ω
RA03	1	1	GD05103140	10KΩ
RA04	1	1	GD05103140	10KΩ
RA05	1	1	GD05221140	220Ω
RA06	1	1	GD05222140	2.2KΩ
RA07	1	1	GD05331140	330Ω
RA08	1	1	GD05223140	22KΩ
RA09	1	1	GD05104140	100KΩ
RA10	1	1	GD05104140	100KΩ
RA11	1	1	GD05152140	1.5KΩ
RA12	1	1	GD05101140	100Ω
RA13	1	1	GD05332140	3.3KΩ
R101	1	1	GD05104140	100KΩ
R102	1	1	GD05101140	100Ω
R103	1	1	GD05223140	22KΩ
R104	1	1	GD05472140	4.7KΩ
R105	1	1	GD05102140	1KΩ

• (N): for Europe
• (T): for United Kingdom

REF. DESIG.	Q'TY N	Q'TY T	PART NO.	DESCRIPTION
R106	1	1	GD05103140	10KΩ
R107	1	1	GD05562140	5.6KΩ
R108	1	1	GD05470140	47Ω
R109	1	1	GD05103140	10KΩ
R110	1	1	GD04101140	100Ω
R111	1	1	GD05100140	10Ω
R112	1	1	GD05470140	47Ω
R113	1	1	GD05273140	27KΩ
R201	1	1	GD05331140	330Ω
R202	1	1	GD05272140	2.7KΩ
R203	1	1	GD05153140	15KΩ
R204	1	1	GD05561140	560Ω
R205	1	1	GD05331140	330Ω
R206	1	1	GD05221140	220Ω
R207	1	1	GD05154140	150KΩ
R208	1	1	GD05222140	2.2KΩ
R209	1	1	GD05103140	10KΩ
R210	1	1	GD05331140	330Ω
R211	1	1	GD05223140	22KΩ
R212	1	1	GD05104140	100KΩ
R213	1	1	RA05030090	50KΩ(B) Trimming
R214	1	1	GD05124140	120KΩ
R215	1	1	GD05563140	56KΩ
R216	1	1	GD05183140	18KΩ
R217	1	1	GD05821140	820Ω
R218	1	1	GD05123140	12KΩ
R219	2	1	RA05020160	5KΩ(B) Trimming
R220	1	1	GD05272140	2.7KΩ
R221	1	1	GD05223140	22KΩ
R301	1	1	GD05103140	10KΩ
R302	1	1	GD05473140	47KΩ
R303	1	1	GD05224140	220KΩ
R304	1	1	RA05020160	5KΩ(B) Trimming
R305	1	1	GD05153140	15KΩ
R306	1	1	GD05821140	820Ω
R307	1	1	RA05020160	5KΩ(B) Trimming
R308	1	1	GD05102140	1KΩ
R309	1	1	RF05390140	39Ω
R310	1	1	GD05472140	4.7KΩ
R311	1	1	GD05472140	4.7KΩ
R312	1	1	GD05154140	150KΩ
R313	1	1	GD05473140	47KΩ
R314	1	1	GD05392140	3.9KΩ
R315	1	1	GD05103140	10KΩ
R317	1	1	GD05221140	220Ω
R318	1	1	GD05221140	220Ω
R319	1	1	GD05104140	100KΩ
R320	1	1	GD05104140	100KΩ
R321	1	1	GD05103140	10KΩ
R322	1	1	GD04103140	10KΩ
R323	1	1	GD05183140	18KΩ
R324	1	1	GD05183140	18KΩ
R325	1	1	GD05103140	10KΩ
R326	1	1	GD05103140	10KΩ
R327	1	1	GD05332140	3.3KΩ
R328	1	1	GD05332140	3.3KΩ
R329	1	1	GD05391140	390Ω
R330	1	1	GD05391140	390Ω
R333	1	1	GD05104140	100KΩ
R334	1	1	GD05104140	100KΩ
R401	1	1	GD05104140	100KΩ
R402	1	1	GD05104140	100KΩ
R403	1	1	GD05222140	2.2KΩ

REF. DESIG.	Q'TY N	Q'TY T	PART NO.	DESCRIPTION
R404	1	1	GD05222140	2.2KΩ
R405	1	1	GD05104140	100KΩ
R406	1	1	GD05104140	100KΩ
R407	1	1	GD05471140	470Ω
R408	1	1	GD05471140	470Ω
R409	1	1	GD05223140	22KΩ
R410	1	1	GD05223140	22KΩ
R411	1	1	GD05274140	270KΩ
R412	1	1	GD05274140	270KΩ
R413	1	1	GD05224140	220KΩ
R414	1	1	GD05224140	220KΩ
R415	1	1	GD05221140	220Ω
R416	1	1	GD05221140	220Ω
R417	1	1	GG05221140	220Ω
R418	1	1	GG05221140	220Ω
				P100-SEMICONDUCTORS
QA01	1	1	HC10041030	IC LA1240
QA02	1	1	HV00006120	Varistor MV203
QA03	1	1	HD20001210	Diode 1S2473
Q101	1	1	HF400451B0	F.E.T. 3SK45B
Q102	1	1	HT310471C0	Transistor 2SC1047(C)
Q103	1	1	HT308291C0	Transistor 2SC829(C)
Q201	1	1	HT308291C0	Transistor 2SC829(C)
Q202	1	1	HD20001210	Diode 1S2473
Q203	1	1	HD20001210	Diode 1S2473
Q204	1	1	HC10028030	IC LA1231
Q205	1	1	HD20001210	Diode 1S2473
Q206	1	1	HD20001210	Diode 1S2473
Q301	1	1	HC10001420	IC KB4437
Q302	1	1	HD20001210	Diode 1S2473
Q303	1	1	HD20001210	Diode 1S2473
Q304	1	1	HD20001210	Diode 1S2473
Q305	1	1	HT309452A0	Transistor 2SC945(O or R)
Q306	1	1	HT309452A0	Transistor 2SC945(O or R)
Q401	1	1	HC10008090	IC JRC4558
				P100-MISCELLANEOUS
FA01	1	1	FF10045200	Ceramic Filter, 450kHz
F201	1	1	FF11070530	Ceramic Filter, SFE 10.7MHz
F202	1	1	FF11070570	Ceramic Filter, SFE 10.7MHz
F203	1	1	FF11070570	Ceramic Filter, SFE 10.7MHz
J101	1	1	YT01040230	Terminal, Antenna
J102	1	1	YT02040260	Terminal, RCA Pin Jack (4P)
J103	1	1	YT02040260	Terminal, RCA Pin Jack (4P)
LA02	1	1	LI10010730	I.F.T. Coil
LA03	1	1	LI10015060	I.F.T. Coil
L101	1	1	LA12026170	Antenna Coil, FM
L102	1	1	LL24800030	Coil, FM RF
L103	1	1	LK11800030	Coil, FM RF
L104	1	1	LC17510010	Choke Coil, 0.75μH
L105	1	1	LI10016010	I.F.T. Coil
L106	1	1	LO12036010	OSC Coil, FM
L107	1	1	LC13320050	Choke Coil, 3.3μH
L201	1	1	LI14030020	I.F.T. Coil, FM Det
SV01	1	1	SS04040040	Slide Switch
SV02	1	1	SR00040080	Rotary Switch
W101	1	1	YU04120260	Jumper Lead, (4P)

• (N): for Europe
• (T): for United Kingdom

REF. DESIG.	Q'TY N	Q'TY T	PART NO.	DESCRIPTION
				P700-MAIN AMP. & POWER SUPPLY CIRCUIT BOARD
P700	1	1	YK105H1610	P.W. Board, Main Amp. & Power Supply
	1	1	ZZ105H1610	P.W. Board Assembly
				P700-CAPACITORS
CE01	1	1	EA10601630	Elect 10μF 16V
CE02	1	1	EA10601630	Elect 10μF 16V
CE03	1	1	DF16152300	Film 1500pF ±10%
CE04	1	1	DF16152300	Film 1500pF ±10%
CE05	1	1	DF16153300	Film 0.015μF ±10%
CE06	1	1	DF16153300	Film 0.015μF ±10%
CE07	1	1	DF16562300	Film 5600pF ±10%
CE08	1	1	DF16562300	Film 5600pF ±10%
CE09	1	1	DF16473300	Film 0.047μF ±10%
CE10	1	1	DF16473300	Film 0.047μF ±10%
CK01	1	1	EA47601030	Elect 47μF 10V
CK02	1	1	EA10700630	Elect 100μF 6.3V
CK03	1	1	EA10703530	Elect 100μF 35V
CN01	1	1	DF17332300	Film 0.033μF ±20%
CN02	2	2	DF17332300	Film 0.033μF ±20%
CN03	1	1	DF17332300	Film 0.033μF ±20%
CN04	1	1	DF17332300	Film 0.033μF ±20%
C701	1	1	EA33505030	Elect 3.3μF 50V
C702	1	1	EA33505030	Elect 3.3μF 50V
C703	1	1	DD15221370	Ceramic 220pF ±5%
C704	1	1	DD15221370	Ceramic 220pF ±5%
C705	1	1	DD15151370	Ceramic 150pF ±5%
C706	1	1	DD15151370	Ceramic 150pF ±5%
C707	1	1	DD11100370	Ceramic 10pF ±0.5pF
C708	1	1	DD11100370	Ceramic 10pF ±0.5pF
C709	1	1	EA10701030	Elect 100μF 10V
C710	1	1	EA10701030	Elect 100μF 10V
C711	1	1	EA47603530	Elect 47μF 35V
C712	1	1	EA47603530	Elect 47μF 35V
C713	1	1	DD15101560	Ceramic 100pF ±5%
C714	1	1	DD15101560	Ceramic 100pF ±5%
C717	1	1	DD11100370	Ceramic 10pF ±0.5pF
C718	1	1	DD11100370	Ceramic 10pF ±0.5pF
C719	1	1	EA22703530	Elect 220μF 35V
C725	1	1	DD15330370	Ceramic 33pF ±5%
C726	1	1	DD15330370	Ceramic 33pF ±5%
C801	1	1	DK18103560	Ceramic 0.01μF
⚠C802	1	1	EB68804540	Elect 6800μF 45V
⚠C803	1	1	EB68804540	Elect 6800μF 45V
C804	1	1	EA47505030	Elect 4.7μF 50V
C805	1	1	EA22705030	Elect 220μF 50V
C806	1	1	EA10605030	Elect 10μF 50V
C807	1	1	EA10705030	Elect 100μF 50V
C808	1	1	EA33603530	Elect 33μF 35V
C809	1	1	EA10703530	Elect 100μF 35V
C810	1	1	EA10701630	Elect 100μF 16V

REF. DESIG.	Q'TY N	Q'TY T	PART NO.	DESCRIPTION
				P700-RESISTORS (All Resistors are ±5% and ¼W)
RE01	1	1	GD05183140	18KΩ
RE02	1	1	GD05183140	18KΩ
RE03	1	1	GD05183140	18KΩ
RE04	1	1	GD05183140	18KΩ
RE05	1	1	GD05183140	18KΩ
RE06	1	1	GD05183140	18KΩ
RE07	1	1	GD05103140	10KΩ
RE08	1	1	GD05103140	10KΩ
RE09	1	1	GD05332140	3.3KΩ
RE10	1	1	GD05332140	3.3KΩ
RE11	1	1	GD05222140	2.2KΩ
RE12	1	1	GD05222140	2.2KΩ
RE13	1	1	RM01040290	100KΩ(C) Variable
RE14	1	1	RM01040290	100KΩ(C) Variable
RK01	1	1	GD05473140	47KΩ
RK02	1	1	GD05103140	10KΩ
RK03	1	1	GD05474140	470KΩ
RK04	1	1	GD05273140	27KΩ
RK05	1	1	GD05473140	47KΩ
RK06	1	1	GD05103140	10KΩ
RK07	1	1	GD05474140	470KΩ
RK08	1	1	GD05153140	15KΩ
RK09	1	1	GD05332140	3.3KΩ
RK10	1	1	GD05273140	27KΩ
⚠RN01	1	1	GG05331140	330Ω
⚠RN02	1	1	GG05331140	330Ω
⚠RN03	1	1	GG05331140	330Ω
⚠RN04	1	1	GG05331140	330Ω
RN05	1	1	GD05222140	2.2KΩ
RN06	1	1	GD05222140	2.2KΩ
RN07	1	1	GD05222140	2.2KΩ
RN08	1	1	GD05222140	2.2KΩ
RN09	1	1	GD05103140	10KΩ
RN10	1	1	GD05103140	10KΩ
R701	1	1	GD05102140	1KΩ
R702	1	1	GD05102140	1KΩ
R703	1	1	GD05563140	56KΩ
R704	1	1	GD05563140	56KΩ
R705	1	1	GD05103140	10KΩ
R706	1	1	GD05103140	10KΩ
R707	1	1	GD05681140	680Ω
R708	1	1	GD05681140	680Ω
R709	1	1	GD05333140	33KΩ
R710	1	1	GD05333140	33KΩ
R711	1	1	GD05272140	2.7KΩ
R712	1	1	GD05272140	2.7KΩ
R713	1	1	GD05333140	33KΩ
R714	1	1	GD05333140	33KΩ
R715	1	1	GD05332140	3.3KΩ
R716	1	1	GD05332140	3.3KΩ
R717	1	1	GD05332140	3.3KΩ
R718	1	1	GD05332140	3.3KΩ
R719	1	1	GG05330140	33Ω
R720	1	1	GG05330140	33Ω

• (N): for Europe
• (T): for United Kingdom

REF. DESIG.	Q'TY N	Q'TY T	PART NO.	DESCRIPTION
R721	1	1	GD05470140	47Ω
R722	1	1	GD05470140	47Ω
R723	1	1	GD05100140	10Ω
R724	1	1	GD05100140	10Ω
R725	1	1	GG05331120	330Ω ½W
R726	1	1	GG05331120	330Ω ½W
⚠R727	1	1	GO10332030	0.33Ω ±10% 3W
⚠R728	1	1	GO10332030	0.33Ω ±10% 3W
⚠R729	1	1	GO10332030	0.33Ω ±10% 3W
⚠R730	1	1	GO10332030	0.33Ω ±10% 3W
R733	1	1	GD05152140	1.5KΩ
R734	1	1	GD05152140	1.5KΩ
R735	1	1	GA05331010	330Ω 1W
R736	1	1	GA05331010	330Ω 1W
R737	1	1	GD05104140	100KΩ
R738	1	1	GD05104140	100KΩ
⚠R739	1	1	GD05152140	1.5KΩ
R740	1	1	GD05102140	1KΩ
R741	1	1	GD05104140	100KΩ
R742	1	1	GD05104140	100KΩ
R743	1	1	GD05104140	100KΩ
R744	1	1	GD05821140	820Ω
⚠R801	1	1	GA05390030	39Ω 3W
R802	1	1	GG05821140	820Ω
R803	1	1	GG05821140	820Ω
R804	1	1	GG05182140	1.8KΩ
R805	1	1	GD05152140	1.5KΩ
R806	1	1	GD05273140	27KΩ
⚠R807	1	1	RF05056140	5.6Ω, Fusible
				P700-SEMICONDUCTORS
QK01	1	1	HT309452A0	Transistor 2SC945(Q or R)
QK02	1	1	HT309452A0	Transistor 2SC945(Q or R)
QK03	1	1	HT309452A0	Transistor 2SC945(Q or R)
QK04	1	1	HT309452A0	Transistor 2SC945(Q or R)
QK05	1	1	HT309452A0	Transistor 2SC945(Q or R)
QK06	1	1	HT309452A0	Transistor 2SC945(Q or R)
QK07	1	1	HD30007090	Zener WZ-140
QN01	1	1	HT309452A0	Transistor 2SC945(Q or R)
QN02	1	1	HT309452A0	Transistor 2SC945(Q or R)
QN03	1	1	HT107332A0	Transistor 2SA733(Q or R)
QN04	1	1	HT107332A0	Transistor 2SA733(Q or R)
QN05	1	1	HD20001210	Diode 1S2473
QN06	1	1	HD20001210	Diode 1S2473
QN07	1	1	HD20001210	Diode 1S2473
QN08	1	1	HD20001210	Diode 1S2473
QN09	1	1	HD20001210	Diode 1S2473
QN10	1	1	HD20001210	Diode 1S2473
QN11	1	1	HD20001210	Diode 1S2473
QN12	1	1	HD20001210	Diode 1S2473
Q701	1	1	HT107502A0	Transistor 2SA750(F or E)
Q702	1	1	HT107502A0	Transistor 2SA750(F or E)
Q703	1	1	HT107502A0	Transistor 2SA750(F or E)
Q704	1	1	HT107502A0	Transistor 2SA750(F or E)
Q705	1	1	HT315092C0	Transistor 2SC1509(R or S)
Q706	1	1	HT315092C0	Transistor 2SC1509(R or S)
Q707	1	1	HV00006120	Varistor MV203
Q708	1	1	HV00006120	Varistor MV203
⚠Q709	1	1	HT315092C0	Transistor 2SC1509(R or S)
⚠Q710	1	1	HT315092C0	Transistor 2SC1509(R or S)

REF. DESIG.	Q'TY N	Q'TY T	PART NO.	DESCRIPTION
⚠Q711	1	1	HT107772C0	Transistor 2SA777(R or S)
⚠Q712	1	1	HT107772C0	Transistor 2SA777(R or S)
⚠Q713	1	1	HT326652B0	Transistor 2SC2665(O or Y)
⚠Q714	1	1	HT326652B0	Transistor 2SC2665(O or Y)
Q715	1	1	HT111352B0	Transistor 2SA1135(O or Y)
Q716	1	1	HT111352B0	Transistor 2SA1135(O or Y)
Q717	1	1	HD20015030	Diode DS135D
Q718	1	1	HD30047090	Zener WZ192
Q719	1	1	HD20015030	Diode DS135D
Q720	1	1	HD20015030	Diode DS135D
Q721	1	1	HD20015030	Diode DS135D
Q722	1	1	HD20015030	Diode DS135D
Q723	1	1	HT317752D0	Transistor 2SC1775(D or C)
Q724	1	1	HT317752D0	Transistor 2SC1775(D or C)
⚠Q801	1	1	HD20009290	Diode S2V-20
⚠Q802	1	1	HD20009290	Diode S2V-20
⚠Q803	1	1	HD20009290	Diode S2V-20
⚠Q804	1	1	HD20009290	Diode S2V-20
⚠Q805	1	1	HD20015030	Diode DS135D
⚠Q806	1	1	HD20015030	Diode DS135D
⚠Q807	1	1	HD20015030	Diode DS135D
⚠Q808	1	1	HT403131Q0	Transistor 2SD313(E)
Q809	1	1	HD30027090	Zener WZ140
Q810	1	1	HD30027090	Zener WZ140
				P700-MISCELLANEOUS
J051	1	1	YJ01001420	Jack, Headphone
S701	1	1	SP02010590	Push Switch, Speaker A/B
				PB00-ANT./OSC CIRCUIT BOARD
PB00	1	1	YF107H0010	P.W. Board, Ant./OSC
			ZZ107H0010	P.W. Board Assembly
				PB00-CAPACITORS
CB01	1	1	CT21600010	Trimming 15pF x 2
CB02	1	1	CT21600010	Trimming 15pF x 2
CB03	1	1	DD11100300	Ceramic 10pF ±0.5pF
CB04	1	1	DD15200300	Ceramic 20pF ±5%
CB05	1	1	DD15680330	Ceramic 68pF ±5%
CB06	1	1	DF55181090	Film 180pF ±5%
CB07	1	1	DF55391090	Film 390pF ±5%
CB08	1	1	DD11100390	Ceramic 10pF ±0.5pF
CB09	1	1	DK16102300	Ceramic 1000pF ±10%
CB10	1	1	DK17103300	Ceramic 0.01μF ±20%
				PB00-MISCELLANEOUS
LB01	1	1	LA10295010	Ant. Coil, MW
LB02	1	1	LA10295020	Ant. Coil, LW
LB03	1	1	LO10010480	OSC Coil, MW
LB04	1	1	LO10010570	OSC Coil, LW
LB05	1	1	LO10010480	OSC Coil, IF Trap
LB06	1	1	LC13320050	Choke Coil, 3.3μH
LB07	1	1	LO10010480	OSC Coil, MW
SB01	1	1	SS06020490	Slide Switch, LW/MW
SB02	1	1	SB12050010	Switch Band, FLX

- (N): for Europe
- (T): for United Kingdom

REF. DESIG.	Q'TY N	Q'TY T	PART NO.	DESCRIPTION
				PS00-SWITCH ASSEMBLY CIRCUIT BOARD
PS00	1	1	YF107H0020	P.W. Board, Switch Assembly
	1	1	ZZ107H0020	P.W. Board Assembly
				PS00-CAPACITORS
CS01	1	1	DF17103300	Film 0.01μF ±20%
CS02	1	1	DF17103300	Film 0.01μF ±20%
CS03	1	1	DF17102300	Film 1000pF ±20%
CS04	1	1	DF17102300	Film 1000pF ±20%
CS05	1	1	DF17563300	Film 0.056μF ±20%
CS06	1	1	DF17563300	Film 0.056μF ±20%
				PS00-RESISTORS (All Resistors are ±5% and ¼W)
RS01	1	1	GD05102140	1KΩ
RS02	1	1	GD05102140	1KΩ
RS03	1	1	GD05273140	27KΩ
RS04	1	1	GD05273140	27KΩ
RS05	1	1	GD05562140	5.6KΩ
RS06	1	1	GD05562140	5.6KΩ
RS07	1	1	GD05102140	1KΩ
RS08	1	1	GD05102140	1KΩ
RS09	1	1	GD05222140	2.2KΩ
RS10	1	1	RM01040270	100KΩ, Variable
RS11	1	1	RK02040120	200KΩ, Variable
				PS00-MISCELLANEOUS
SS01	1	1	SP04050210	Push Switch
WS01	1	1	YU06140260	Jumper Lead, (6P) 140mm
WS02	1	1	YU06140260	Jumper Lead, (6P) 140mm
WS03	1	1	YU03220260	Jumper Lead, (6P) 220mm
				PT00-SPEAKER TERMINAL CIRCUIT BOARD
PT00	1	1	YK105H1650	P.W. Board, Speaker Terminal
	1	1	ZZ105H1650	P.W. Board Assembly
				PT00-CAPACITORS
CT01	1	1	DF17104500	Film 0.1μF ±20%
CT02	1	1	DF17104500	Film 0.1μF ±20%
CT03	1	1	DF17104500	Film 0.1μF ±20%
CT04	1	1	DF17104500	Film 0.1μF ±20%
CT05	1	1	DK18403320	Ceramic 0.04μF +80%−20%
CT06	1	1	DK18403320	Ceramic 0.04μF +80%−20%
				PT00-RESISTORS
RT01	1	1	GJ05100010	10Ω ±5% 1W
RT02	1	1	GJ05100010	10Ω ±5% 1W
RT03	1	1	GJ05100010	10Ω ±5% 1W
RT04	1	1	GJ05100010	10Ω ±5% 1W
				PT00-MISCELLANEOUS
PJ01	1	1	YT03080010	Terminal, SPK. (8P)
WT01	1	1	YU06500240	Jumper Lead, (6P) 500mm
				PU00-POWER SWITCH CIRCUIT BOARD
PU00	1	1	YK105H1660	P.W. Board, Power Switch
	1	1	ZZ105H1660	P.W. Board Assembly
⚠G001	1	1	DK18103840	Ceramic Cap. 0.01μF
⚠S001	1	1	SP01010390	Push Switch, Power

REF. DESIG.	Q'TY N	Q'TY T	PART NO.	DESCRIPTION
				PX00-SIGNAL & TUNING LED CIRCUIT BOARD
PX00	1	1	YK105H1620	P.W. Board, Signal & Tuning LED
	1	1	ZZ105H1620	P.W. Board Assembly
				PX00-CAPACITORS
CX01	1	1	EA10701630	Elect 100μF 16V
CX01	1	1	EA47601030	Elect 47μF 10V
				PX00-RESISTORS (All Resistors are ±5% and ¼W)
RX01	1	1	GD05102140	1KΩ
RX02	1	1	GD05102140	1KΩ
RX03	1	1	GD05221140	220Ω
RX04	1	1	GD05821140	820Ω
RX05	1	1	GD05152140	1.5KΩ
RX06	1	1	GD05152140	1.5KΩ
RX07	1	1	GD05152140	1.5KΩ
RX08	1	1	GD05104140	100KΩ
RX09	1	1	GD05103140	10KΩ
RX10	1	1	GD05392140	3.9KΩ
RX11	1	1	GD05392140	3.9KΩ
RX12	1	1	GD05821140	820Ω
RX13	1	1	GD05821140	820Ω
RX14	1	1	GD05152140	1.5KΩ
RX15	1	1	GD05152140	1.5KΩ
RX16	1	1	GD05152140	1.5KΩ
RX17	1	1	GD05102140	1KΩ
RX18	1	1	GD05222140	2.2KΩ
				PX00-SEMICONDUCTORS
QX01	1	1	HC10003320	IC IR2E11
QX02	1	1	HD20001210	Diode 1S2473
QX03	1	1	HI10007320	L.E.D. GL-9PR9, Red
QX04	1	1	HI10007320	L.E.D. GL-9PR9, Red
QX05	1	1	HI10007320	L.E.D. GL-9PR9, Red
QX06	1	1	HI10007320	L.E.D. GL-9PR9, Red
QX07	1	1	HI10006320	L.E.D. GL-9NG9, Green
QX08	1	1	HI10006320	L.E.D. GL-9NG9, Green
QX09	1	1	HI10007320	L.E.D. GL-9PR9, Red
QX10	1	1	HI10007320	L.E.D. GL-9PR9, Red
				PX00-MISCELLANEOUS
WX01	1	1	YU05240260	Jumper Lead, (5P) 240mm
WX02	1	1	YU05240260	Jumper Lead, (5P) 240mm
				P001-LED CIRCUIT BOARD
P001	1	1	YF403H0010	P.W. Board, LED
	1	1	ZZ403H0010	P.W. Board Assembly
Q001	1	1	HI10014300	L.E.D.

(W01-99)	**Assembly and Wiring**
(T01-99)	**Adjustment**
(X01-00)	**Correction**

8. TECHNICAL SPECIFICATIONS

AUDIO SECTION

POWER OUTPUT PER CHANNEL

4 OHMS DIN	**48W**
4 OHMS RMS	**33W**
8 OHMS DIN	**35W**
8 OHMS RMS	**30W**
TOTAL HARMONIC DISTORTION AT RMS 8 OHMS	**0.3%**
DAMPING FACTOR 8 OHMS	**30**

Frequency Response	
Phono (RIAA)	±1.0 dB
Aux (±1 dB)	20 Hz – 20 kHz
Signal-to-Noise Ratio	
Phono	70 dB
Aux	90 dB
Input Terminals	
Phono: Input Sensitivity/Impedance	2.7 mV/47 kohms
Aux: Input Sensitivity/Impedance	160 mV/20 kohms

FM TUNER SECTION

Frequency Range	87.5 – 108 MHz
Usable Sensitivity	
DIN Mono (S/N 26 dB, 75 ohms)	1.5 μV
DIN Stereo (S/N 46 dB, 75 ohms)	25 μV
Alternate Channel Selectivity, 98 MHz	65 dB
Signal-to-Noise Ratio, 98 MHz	
Unweighted: Mono	65 dB
Stereo	50 dB
Weighted: Mono	70 dB
Stereo	65 dB

MW TUNER SECTION

Frequency Range	525 – 1630 kHz
Usable Sensitivity (20 dB S/N 30% Mod., 1 MHz)	10 μV
Selectivity	25 dB

LW TUNER SECTION

Frequency Range	150 – 350 kHz
Usable Sensitivity (20 dB S/N 30% 250 kHz)	100 μV

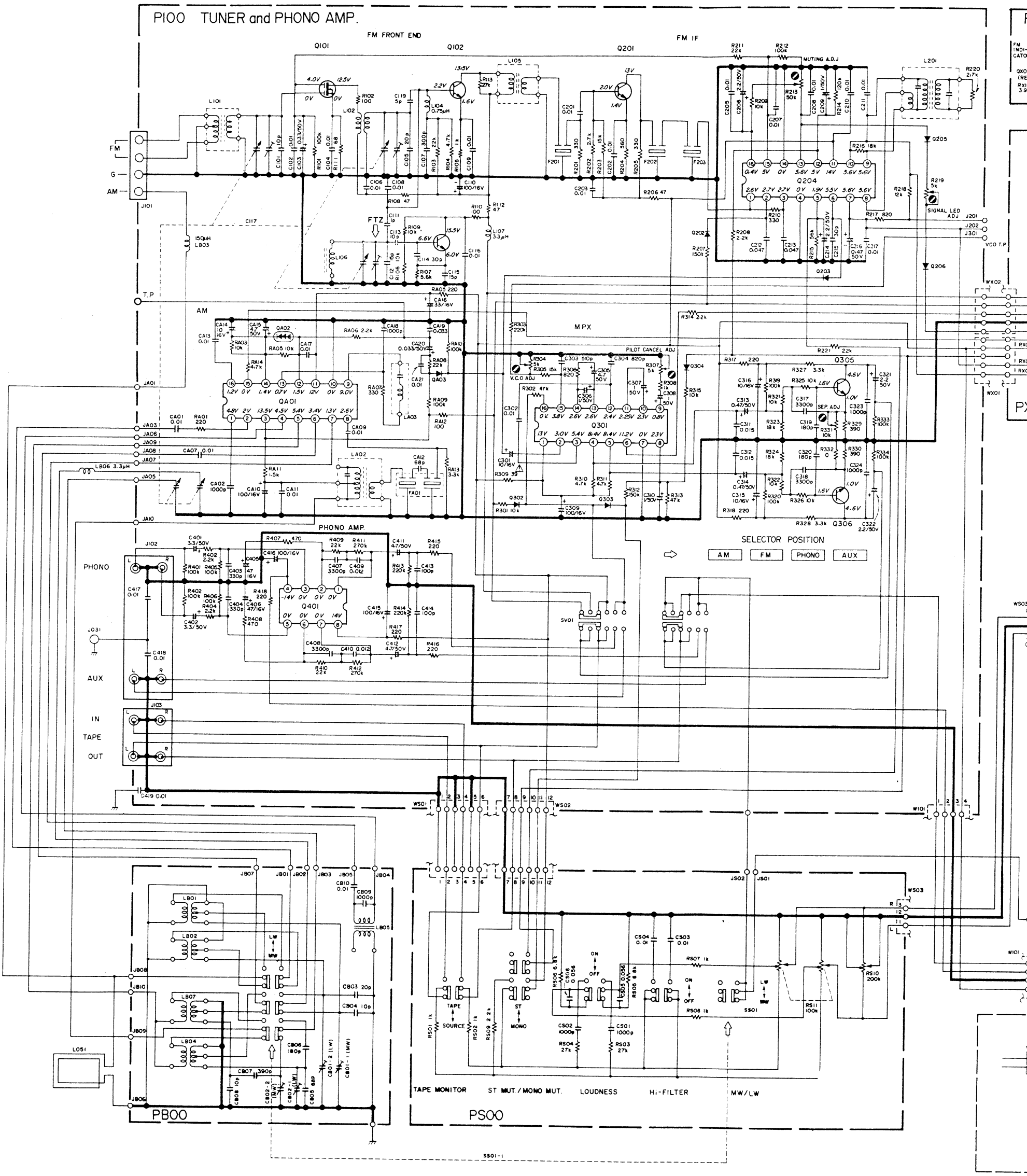
GENERAL

Power Requirements	220V AC, 50 Hz
	(E and N versions are featuring an external voltage selector for use on other voltages. Other versions can be converted by a qualified technician to operate on 240V.)
Power Consumption at Rated Output, Both Channels Operating	160W
Dimensions	
Panel Width	416 mm
Panel Height	73 mm
Depth	302 mm
Weight	
Unit alone	6 kg

Specifications and apperance are subject to change for modification without notice.

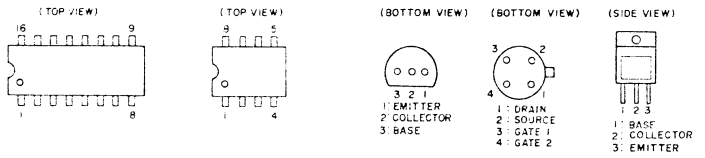
MEMORANDUM

9. SCHEMATIC DIAGRAM



Note on safety: The parts marked with ⚠ are important parts on the safety. Please use the parts having the designated parts number without fail.

Q101 HF400451B0 3SK45B	Q401 HC10003090 4558D	Q717, Q719~Q722 HD20015030 DS135D	QG01 HC10003090 4558D	QX03~QX06, QX09, QX10 HI10007320 GL-9PR9(RED)
Q102 HT314071C0 2SC1047(C)	Q701~Q704 HT107502A0 2SA750(E or F)	Q718 HD30047090 WZ192	QK01~QK06 HT309452A0 2SC945(Q or R)	QX07, QX08 HI10006320 GL-9PG9(GRN)
Q103, Q201 HT308291C0 2SC829(C)	Q705, Q706 HT315092C0 2SC1509(R or S)	Q723, Q724 HT314001E0 2SC1400(E)	QK07 HD30027090 WZ140	
Q204 HC10028030 LA1231	Q707, Q708 HV00006120 MV203	Q801~Q804 HD20015030 S2V-20	QN01, QN02 HT309452A0 2SC945(Q or R)	
Q205, Q206 HD20001210 IS2473	Q709, Q710 HT315092C0 2SC1509(R or S)	Q805~Q807 HD20015030 DS135D	QN03, QN04 HT107332A0 2SA733(Q or R)	NO MARKING RESISTOR ; OHM, 1/4W NO MARKING CAPACITOR ; μF, 50V
Q301 HC10001420 KB4437	Q711, Q712 HT107772C0 2SA777(R or S)	Q808 HT403131Q0 2SD313(E)	QN05~QN12 HD20001210 IS2473	
Q302~Q304 HD20001210 IS2473	Q713, Q714 HT326652B0 2SC2665(O or Y)	Q809, Q810 HD30027090 WZ140	QX01 HC10003320 IR2E11	
Q305, Q306 HT309452A0 2SC945(Q or R)	Q715, Q716 HT111352B0 2SA1135(O or Y)	QA01 HC10041030 LA1240	QX02 HD20001210 IS2473	



Q204, Q301, QA01, QX01 | Q401, QG01(F ONLY) | Q102, Q103, Q201, Q305, Q306, Q701~Q706, Q709~Q712, QN01~QN04, QK01~QK06 | Q101 | Q713~Q716, Q808